THAT WHICH IS CLAIMED IS:

1. A receiver for a spread spectrum burst signal having a predetermined period comprising:

a time invariant matched filter for comparing an input signal to at least one reference signal based upon a pseudo-noise (PN) code and providing a stream of data values;

a threshold comparator for comparing each of the data values to a threshold to determine an acquisition time for the spread spectrum burst signal;

a contrast filter connected between said time invariant matched filter and said threshold comparator for varying the threshold based upon an interference level to reduce instances of false acquisition detections; and

a window sampler for selectively sampling the data values based upon the acquisition time and the predetermined period.

2. The receiver of Claim 1 wherein said contrast filter subtracts a weighted average of a current and previous data values from the current data value.

3. The receiver of Claim 1 wherein said contrast filter comprises:

a plurality of delay registers connected in series and each providing an output; and

a summer for summing the outputs from said plurality of delay registers.

4. The receiver of Claim 1 wherein said input signal comprises in-phase (I) and quadrature (Q) values; and wherein said time invariant matched filter

compares the I and Q values of the input signal to I and Q values of the at least one reference signal and provides a stream of I and Q data values.

5. The receiver of Claim 4 further comprising a magnitude converter connected between said time invariant matched filter and said contrast filter for converting I and Q data values into a magnitude data value.

6. The receiver of Claim 1 further comprising a counter connected to said threshold comparator for generating an acquisition count based upon the acquisition time.

7. The receiver of Claim 6 further comprising a window controller connected to said counter and generating a window strobe signal for controlling said window sampler.

8. The receiver of Claim 1 further comprising:

a memory connected to said window sampler for storing the data values; and

a processor connected to said memory for processing the stored data values.

9. The receiver of Claim 8 wherein said processor performs non-real time processing of the stored data values.

10. The receiver of Claim 1 wherein the stream of data values comprises a complex stream of data values based upon a degree and phase of

correlation between the input signal and the at least one reference signal.

11. The receiver of Claim 1 wherein said time invariant matched filter continuously searches over at least one of time, frequency, phase, and PN code alignments.

12. The receiver of Claim 1 wherein said time invariant matched filter comprises a discrete time, discrete amplitude device implementing a complex arithmetic cross correlation function.

13. The receiver of Claim 1 further comprising a down converter upstream from said time invariant matched filter.

14. The receiver of Claim 13 further comprising a low noise amplifier upstream from said down converter.

15. The receiver of Claim 1 further comprising an analog-to-digital (A/D) converter upstream from said time invariant matched filter.

16. A receiver for a spread spectrum burst signal having a predetermined period comprising:

a time invariant matched filter for comparing an input signal to at least one reference signal based upon a pseudo-noise (PN) code and providing a stream of data values;

a threshold comparator for comparing each of the data values to a threshold to determine an acquisition time for the spread spectrum burst signal; and

a contrast filter connected between said time invariant matched filter and said threshold comparator for varying the threshold based upon an interference level to reduce instances of false acquisition detections.

17. The receiver of Claim 16 wherein said contrast filter subtracts a weighted average of a current and previous data values from the current data value.

18. The receiver of Claim 16 wherein said contrast filter comprises:

a plurality of delay registers connected in series and each providing an output; and

a summer for summing the outputs from said plurality of delay registers.

19. The receiver of Claim 16 wherein said input signal comprises in-phase (I) and quadrature (Q) values; and wherein said time invariant matched filter compares the I and Q values of the input signal to I and Q values of the at least one reference signal and provides a stream of I and Q data values.

20. The receiver of Claim 19 further comprising a magnitude converter connected between said time invariant matched filter and said contrast filter for converting I and Q data values into a magnitude data value.

21. The receiver of Claim 16 wherein said time invariant matched filter continuously searches over at least one of time, frequency, phase, and PN code alignments.

22. A receiver for a spread spectrum burst signal having a predetermined period comprising:

a time invariant matched filter for comparing an input signal to at least one reference signal based upon a pseudo-noise (PN) code and providing a stream of data values;

a threshold comparator for comparing each of the data values to a threshold to determine an acquisition time for the spread spectrum burst signal; and

a window sampler for selectively sampling the data values based upon the acquisition time and the predetermined period.

23. The receiver of Claim 22 further comprising a counter connected to said threshold comparator for generating an acquisition count based upon the acquisition time.

24. The receiver of Claim 23 further comprising a window controller connected to said counter and generating a window strobe signal for controlling said window sampler.

25. The receiver of Claim 22 further comprising:

a memory connected to said window sampler for storing the data values; and

a processor connected to said memory for processing the stored data values.

26. The receiver of Claim 25 wherein said processor performs non-real time processing of the stored data values.

27. The receiver of Claim 22 wherein said time invariant matched filter continuously searches over at least one of time, frequency, phase, and PN code alignments.

28. A receiver for a spread spectrum burst signal having a predetermined period comprising:

a time invariant matched filter for comparing an input signal to at least one reference signal based upon a pseudo-noise (PN) code and providing a complex stream of data values based upon a degree and phase of correlation between the input signal and the at least one reference signal; and

a threshold comparator for comparing each of the data values to a threshold to determine an acquisition time for the spread spectrum burst signal.

29. The receiver of Claim 28 wherein said input signal comprises in-phase (I) and quadrature (Q) values; and wherein said time invariant matched filter compares the I and Q values of the input signal to I and Q values of the at least one reference signal and provides a complex stream of I and Q data values.

30. The receiver of Claim 28 wherein said time invariant matched filter continuously searches over at least one of time, frequency, phase, and PN code alignments.

31. The receiver of Claim 28 wherein said time invariant matched filter comprises a discrete time, discrete amplitude device implementing a complex arithmetic cross correlation function.

32. A method for receiving a spread spectrum burst signal having a predetermined period comprising:

comparing an input signal to at least one reference signal based upon a pseudo-noise (PN) code and providing a stream of data values;

comparing each of the stream of data values to a threshold to determine an acquisition time for the spread spectrum burst signal; and

varying the threshold based upon an interference level to reduce instances of false acquisition detections.

33. The method of Claim 32 wherein varying comprises subtracting a weighted average of a current and previous data values from a current data value.

34. The method of Claim 32 wherein the input signal comprises in-phase (I) and quadrature (Q) values; and wherein comparing the input signal to the at least one reference signal comprises comparing the I and Q values of the input signal to I and Q values of the at least one reference signal and providing a stream of I and Q data values.

35. The method of Claim 34 further comprising converting I and Q data values into a magnitude data value.

36. The method of Claim 32 wherein comparing the input signal to the at least one reference signal comprises continuously searching over at least one of time, frequency, phase, and PN code alignments.

37. A method for receiving a spread spectrum burst signal having a predetermined period comprising:

comparing an input signal to at least one reference signal based upon a pseudo-noise (PN) code and providing a stream of data values;

comparing each of the stream of data values to a threshold to determine an acquisition time for the spread spectrum burst signal; and

selectively sampling the data values based upon the acquisition time and the predetermined period.

38. The method of Claim 37 further comprising generating an acquisition count based upon the acquisition time.

39. The method of Claim 37 further comprising storing the data values and processing the stored data values.

40. The method of Claim 39 wherein processing comprises processing the stored data values in non-real time.

41. The method of Claim 37 wherein comparing the input signal to the at least one reference signal comprises continuously searching over at least one of time, frequency, phase, and PN code alignments.

42. A method for receiving a spread spectrum burst signal having a predetermined period comprising:

comparing an input signal to at least one reference signal based upon a pseudo-noise (PN) code;

providing a complex stream of data values based upon a degree and phase of correlation between the input signal and the at least one reference signal; and

comparing each of the data values to a threshold to determine an acquisition time for the spread spectrum burst signal.

43. The method of Claim 42 wherein said input signal comprises in-phase (I) and quadrature (Q) values; wherein comparing the input signal to the at least one reference signal comprises comparing the I and Q values of the input signal to I and Q values of the at least one reference signal; and wherein providing comprises providing a complex stream of I and Q data values.

44. The method of Claim 42 wherein comparing the input signal to the at least one reference signal comprises continuously searching over at least one of time, frequency, phase, and PN code alignments.